

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

ATTORNEY'S DOCKET NUMBER

0104-0340P

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

09/856071

INTERNATIONAL APPLICATION NO.

PCT/SE99/02119

INTERNATIONAL FILING DATE

November 18, 1999

PRIORITY DATE CLAIMED

November 18, 1998

TITLE OF INVENTION

REGISTRATION UNIT

APPLICANT(S) FOR DO/EO/US

HAEGGSTROM, Jimmy

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39 (1).
4. ☐ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☒ has been transmitted by the International Bureau. WO 00/29967
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - a. ☒ is transmitted herewith.
 - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4)
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☒ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 20. below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.-1449 and International Search Report w/ cited documents
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A **FIRST** preliminary amendment.
14. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825.
18. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information:
PCT/IPEA/409
Amended Figure Letter
One (1) sheet of formal drawing

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <div style="font-size: 2em; font-weight: bold;">09/856071</div>		INTERNATIONAL APPLICATION NO. PCT/SE99/02119		ATTORNEY'S DOCKET NUMBER 0104-0340P	
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21. <input checked="" type="checkbox"/> The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5): Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. \$1,000.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$860.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO. \$710.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$690.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00 ENTER APPROPRIATE BASIC FEE AMOUNT =	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">CALCULATIONS</th> <th style="width:50%;">PTO USE ONLY</th> </tr> <tr> <td style="height: 150px; vertical-align: bottom;"> <div style="text-align: right; font-weight: bold;">\$ 1,000.00</div> </td> <td></td> </tr> </table>		CALCULATIONS	PTO USE ONLY	<div style="text-align: right; font-weight: bold;">\$ 1,000.00</div>	
CALCULATIONS	PTO USE ONLY					
<div style="text-align: right; font-weight: bold;">\$ 1,000.00</div>						

Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	0	
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CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE			
Total Claims	16 - 20 =	0	X \$18.00	\$	0	
Independent Claims	2 - 3 =	0	X \$80.00	\$	0	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			Yes	+ \$270.00	\$	270.00
TOTAL OF ABOVE CALCULATIONS =				\$	1,270.00	

<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$	0	
SUBTOTAL =				\$	1,270.00	

Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	0	
TOTAL NATIONAL FEE =				\$	1,270.00	

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	0	
TOTAL FEES ENCLOSED =				\$	1,270.00	

		Amount to be:	
		refunded	\$
		charged	\$

a. ☒ A check in the amount of \$ 1,270.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees.
 A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any
 overpayment to Deposit Account No. 02-2448.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

Send all correspondence to:
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P.O. Box 747
Falls Church, VA 22040-0747
(703)205-8000

Date: May 17, 2001

By Paul C. Irwin
 For Joe McKinney Muncy, #32,334
 # 43,368

09/856071

JC08 Rec'd PCT/PTO 17 MAY 2001

PATENT
0104-0340P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: HAEGGSTROM, Jimmy Conf.:
Int'l. Appl. No.: PCT/SE99/02119
Appl. No.: NEW Group:
Filed: May 17, 2001 Examiner:
For: REGISTRATION UNIT

PRELIMINARY AMENDMENT

BOX PATENT APPLICATION

Assistant Commissioner for Patents
Washington, DC 20231

May 17, 2001

Sir:

The following Preliminary Amendments and Remarks are respectfully submitted in connection with the above-identified application.

AMENDMENTS

IN THE SPECIFICATION:

Please amend the specification as follows:

Before line 1, insert --This application is the national phase under 35 U.S.C. § 371 of PCT International Application No. PCT/SE99/02119 which has an International filing date of November 18, 1999, which designated the United States of America and was published in English.

IN THE CLAIMS:

Please amend the claims as follows:

4. (Amended) A registration unit as claimed in claim 1, characterized in that the registration module (12) comprises an aerial (13), a radio communication part (14) with a control part for the radio communication and a converting part (15) for conversion of a signal received from the information carrier into a signal usable by the processing unit.

6. (Amended) A registration unit as claimed in claim 1, characterized in that it further comprises means for reading bar codes.

7. (Amended) A registration unit as claimed in claim 1, characterized in that the registration module is adapted to be completely accommodated in the space for memory expansion in the mobile processing unit (11).

8. (Amended) A registration unit as claimed in claim 1, characterized in that the registration modules emulates a memory to the processing module, the processing unit communicating with the registration module in the same way as with a conventional memory.

14. (Amended) A registration module as claimed in claim 10, characterized in that it is adapted to emulate a memory to the processing module, the processing unit communicating with the registration module in the same way as with a conventional memory.

REMARKS

The specification has been amended to provide a cross-reference to the previously filed International Application. The claims have also been amended to delete improper multiple dependencies and to place the application into better form for examination. Entry of the present amendment and favorable action on the above-identified application are earnestly solicited.

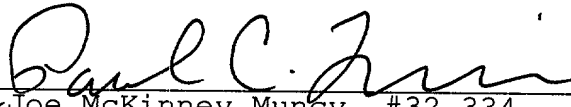
Attached hereto is a copy Mark-up copy of the changes made to the application by this amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By


for Joe McKinney Muncy, #32,334
#43,368

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KM/rem
0104-0340P

(Rev. 02/12/01)

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

The claims have been amended as follows:

4. (Amended) A registration unit as claimed in [any one of claims 1-3] claim 1, characterized in that the registration module (12) comprises an aerial (13), a radio communication part (14) with a control part for the radio communication and a converting part (15) for conversion of a signal received from the information carrier into a signal usable by the processing unit.

6. (Amended) A registration unit as claimed in [any one of the preceding claims] claim 1, characterized in that it further comprises means for reading bar codes.

7. (Amended) A registration unit as claimed in [any one of the preceding claims] claim 1, characterized in that the registration module is adapted to be completely accommodated in the space for memory expansion in the mobile processing unit (11).

8. (Amended) A registration unit as claimed in [any one of the preceding claims] claim 1, characterized in that the registration modules emulates a memory to the processing module, the processing unit communicating with the registration module in the same way as with a conventional memory.

14. (Amended) A registration module as claimed in [any one of claims 10-13] claim 10, characterized in that it is adapted to emulate a memory to the processing module, the processing unit communicating with the registration module in the same way as with a conventional memory.

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JC08 Rec'd PCT/PTO 17 MAY 2001

REGISTRATION UNITField of the Invention

The present invention relates to a registration unit intended for wireless communication with an information carrier, such as a transponder, and comprising a mobile unit. The invention further relates to a registration module for wireless communication with an information carrier, said module being connectible with another mobile unit.

10 Background Art

In mobile identification equipment, size is an essential factor, and it is desirable to reduce the size of the units included as much as possible. Identification equipment available today usually comprise a hand-held computer with an accessory module for wireless communication between the identification unit and an information carrier, such as a transponder. As a result, they will be large and unwieldy and not ergonomically designed. The accessory modules usually have a separate plastic casing which must be adapted to each hand-held computer and be attached to the same.

A further problem of today's identification equipment is that it is often necessary for the hand-held computer to participate in the identification process.

For example, lists of approved transponders must be stored and searched in the hand-held computer. This results in the hand-held computer being prevented from performing other tasks during identification.

Moreover, separate output ports of the hand-held computer are normally required to allow the accessory module to be connected. As a rule, a serial interface and an RS232 plug are used.

Object of the Invention

An object of the present invention therefore is to provide a registration unit which makes it possible to read and write information to/from data carriers with both simple and advanced mobile equipment, and which wholly, or at least partly, solves the above problems of prior-art technique.

This object is achieved by a registration unit and a registration module according to the appended claims.

By means of the registration unit and the registration module according to the invention, a combination of wireless identification with the aid of RFID (Radio Frequency IDentification) and a bar code will now be possible without necessitating reading of one at a time and changing of the accessory module between readings, which is necessary in currently used equipment. Thus, simultaneous reading of, for instance, transponders and bar codes can be effected by arranging a registration unit according to the invention in the space for memory expansion of a hand-held computer equipped for bar code reading. Besides, most hand-held computers have two internal spaces for an additional memory, one space being usable to receive a registration module while the other can be used to receive an additional memory unit.

By arranging the registration module in the space for memory expansion of the mobile processing unit, the size of the registration unit will be minimised. Moreover, the connection of the registration module can be made simple by the ports that are intended for the additional memory being used for communication between the registration module and the processing unit.

It is also an advantage of the invention that it enables integration of the hand-held computer and the registration module, which in turn renders it possible to avoid or minimise the need for cabling, which increases the reliability of the system. Safe identification by means of transponders will thus be possible

with mobile equipment, which was previously difficult to perform owing to size, price, unwieldy shape and functionality.

5 Brief Description of the Drawings

The invention will be described below in more detail by way of an embodiment and with reference to the accompanying drawing, which in a block diagram schematically shows a system with a registration module designed
10 according to the invention.

Description of Preferred Embodiments

The registration unit according to the invention suitably comprises a registration module 12 of RFID type,
15 i.e. Radio Frequency IDentification. With the aid of this module, a reading/writing function is obtained for data carriers (e.g. transponders) with mobile units such as hand-held computers. The registration module, however, can also be adapted to other forms of wireless communi-
20 cation by means of radio waves. Preferably, however, it is adapted to communicate with an information carrier 10 which consists of a mobile unit which can store information and preferably which consists of a passive unit operated by energy which is transmitted in a wireless
25 manner by the registration unit. It is also possible to employ information carriers using a battery or other internal energy sources within the scope of the invention.

The RFID module is adapted to be connected to a
30 hand-held mobile unit 11 (e.g. a computer, a telephone or a combination thereof), which can accommodate at least one additional memory module. The registration module thus provides the mobile unit 11 with a reading/writing function for exchange of information to/from data car-
35 riers (e.g. transponders) in a contactless manner by means of radio waves (e.g. RFID technique).

The RFID module is intended for use inside the mobile unit and is preferably formed as a small but thick credit card which is inserted into the mobile unit, such as a hand-held computer. Consequently, the RFID module will not be visible in normal use and thus does not affect the total size of the registration unit.

The RFID module is preferably connected to the connections that are intended for memory expansion to establish communication between the registration module and the mobile unit. Moreover, the power supply of the module is preferably obtained via the same connecting means which provides communication to the hand-held computer/mobile unit and which is, for example, a 6-pole connector. Preferably, the registration module emulates a memory to the processing unit, which will see the registration module as an additional memory and also communicate with the same as if it were a conventional memory.

A casing for the registration module is suitably made of, for instance, plastic. The dimensions may vary but the casing can advantageously be designed as, for instance, SSD (Solid State Disk) memories, the size of which is 64*42*6mm, or as compact flash memories which are a standard for memory modules in hand-held units.

The RFID module may comprise, for example, an aerial or antenna, a radio communication part for receiving and transmitting radio signals and a converting unit to enable communication between the radio communication part and the processing unit 11. The aerial can be used to receive and transmit radio waves and thus serves as an interface against the information carriers 10. The radio communication part can be, for example, a passive part, such as an RFID chip, which is used to control the aerial and/or to generate signals to the aerial. The converting unit 15 preferably comprises a one-chip computer or the like as well as a converting part. The one-chip computer is the active part which controls the radio communication part so that the correct

function is achieved. The converting part can be a stand-alone part or be included as part of the one-chip computer and serves to adapt the output signal from the one-chip computer to the surroundings, for example to
5 emulate a RAM memory (Random Access Memory). All the parts included in the RFID module can advantageously be arranged, and preferably soldered, on a common printed board. The RFID module further comprises preferably at least one connecting means to physically connect the
10 module to the processing unit for transmitting signals therebetween. The parts included in the RFID module can also be combined to one or more chips having similar functions.

The module can also be supplemented with memory
15 modules to obtain a combined smart unit, which, for instance, can store information about which transponders are approved in the specific application and only inform the hand-held computer when an approved (according to numbers stored) transponder is available in the reading
20 area of the module, the transponder communicating with the hand-held computer via the module, for identification, logging of number, time and date, whereupon the hand-held computer can take a preprogrammed action if any. This can also be an electricity-saving function
25 towards the battery supply of the hand-held computer since the RFID module takes care of the decoding even before the hand-held computer would otherwise have received the transponder number, which promotes a faster process and simpler and faster software in the hand-held
30 computer/ mobile unit. Rapidity is an important aspect of hand-held computers, and if the check of the transponder number is handled in the RFID module, a larger processor capacity for the actual application in the hand-held computer is made available.

35 The registration module described above can be used in many fields: for instance, marking in service, industry; passage control of pallets, hoists, robots, machi-

nery, animals, departing/arriving goods; stock-handling, charging; identification at predetermined locations for reading of metering points, e.g. water, electricity, gas, oil, pressure, flow rate and registration of measured values. Additional fields of application are messengers for delivering documents and parcels, identification and registration of mud collectors, lorry weighers, computers, tarpaulins, tents, canoes, pallets (wood and metal), paintings, trees, mobile phones etc. Furthermore the invention can be used by real-estate security officers for confirmation of attendance.

The invention is not limited to the above embodiments, and several variants are conceivable within the scope of the appended claims. For example, the module can be provided with a memory.

PCT/SE99/02119

CLAIMS

1. A mobile registration unit intended for wireless
5 communication with an information carrier (10), and comprising a mobile processing unit (11), c h a r a c -
t e r i s e d in that it further comprises a registration
module (12), which is adapted to be received in a space
10 for memory expansion in the mobile processing unit (11),
the communication between the information carrier (10)
and the mobile processing unit (11) being effected by
means of radio waves via the registration module (12).

2. A registration unit as claimed in claim 1,
c h a r a c t e r i s e d in that the mobile processing
15 unit (11) consists of a hand-held computer, mobile tele-
phone, pocket diary or a combination thereof, which is
provided with a microprocessor.

3. A registration unit as claimed in claim 1 or 2,
c h a r a c t e r i s e d in that it is adapted to commu-
20 nicate with an information carrier (10) which consists of
a mobile unit capable of storing information, and prefer-
ably which consists of a passive unit operated by energy
which is transmitted in a wireless manner by the regi-
stration unit.

25 4. A registration unit as claimed in any one of
claims 1-3, c h a r a c t e r i s e d in that the regi-
stration module (12) comprises an aerial (13), a radio
communication part (14) with a control part for the radio
communication and a converting part (15) for conversion
30 of a signal received from the information carrier into
a signal usable by the processing unit.

5. A registration unit as claimed in claim 4,
c h a r a c t e r i s e d in that the registration module
further comprises memory means for storing of informa-
35 tion, and comparing means for comparing a signal received
from an information carrier with information stored in
the memory means.

6. A registration unit as claimed in any one of the preceding claims, characterised in that it further comprises means for reading bar codes.

5 7. A registration unit as claimed in any one of the preceding claims, characterised in that the registration module is adapted to be completely accommodated in the space for memory expansion in the mobile processing unit (11).

10 8. A registration unit as claimed in any one of the preceding claims, characterised in that the registration modules emulates a memory to the processing module, the processing unit communicating with the registration module in the same way as with a conventional memory.

15 9. A registration unit as claimed in claim 8, characterised in that the registration module emulates a flash memory or an SSD (Solid State Disk) memory to the processing unit.

20 10. A registration module (12) for wireless communication with an information carrier (10), characterised in that it is adapted to communicate with the information carrier (10) by means of radio waves, and that it is designed to be accommodated in a space for memory expansion in a mobile processing unit (11).

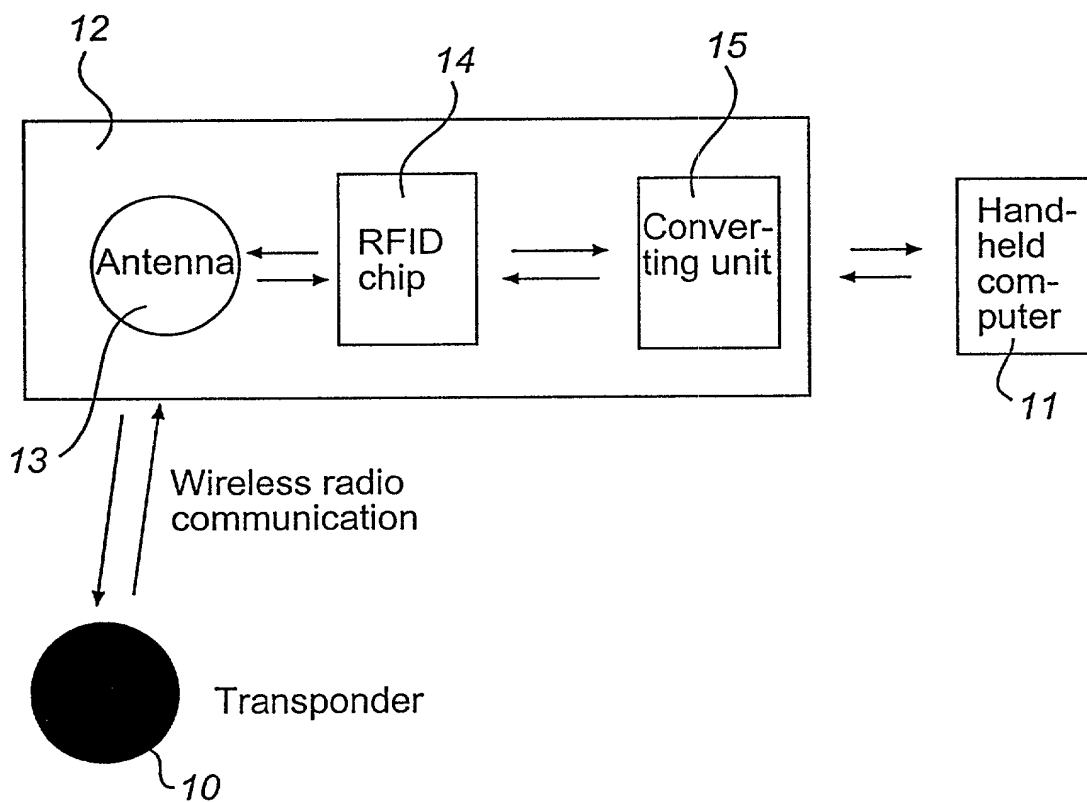
25 11. A registration module as claimed in claim 10, characterised in that it is adapted to communicate with an information carrier (10) which consists of a mobile unit capable of storing information, and preferably which consists of a passive unit operated by
30 energy which is transmitted in a wireless manner by the registration unit.

12. A registration module as claimed in claim 10 or 11, characterised in that the registration module (12) comprises an aerial (13), a radio communication part (14) with a control part for the radio communication and a converting part (15) for converting a sig-
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14. A registration module as claimed in any one of
10 claims 10-13, characterised in that it is
adapted to emulate a memory to the processing module,
the processing unit communicating with the registration
module in the same way as with a conventional memory.

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LEASE NOTE:
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 FOLLOWING

COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT AND DESIGN APPLICATIONS

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Inventor Title:

REGISTRATION UNIT

If in Appropriate
 Information -
 or Use Without
 Certification
 Attached:

the specification of which is attached hereto. If not attached hereto,
 the specification was filed on _____ as
 United States Application Number _____
 and amended on _____ (if applicable) and/or
 the specification was filed on November 18, 1999 _____ as PCT
 International Application Number PCT/SE99/02119 _____, and was
 amended under PCT Article 19 on _____ (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representative or assigns more than twelve months (six months for designs) prior to this application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows.

I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

9803975-3 (Number)	Sweden (Country)	November 18, 1998 (Month/Day/Year Filed)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Month/Day/Year Filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Month/Day/Year Filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Month/Day/Year Filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional applications(s) listed below.

Provisional
 Application(s):
 any)

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More than 12 Months (6 Months for Designs) Prior to the Filing Date of This Application:

Country	Application Number	Date of Filing (Month/Day/Year)
_____	_____	_____
_____	_____	_____

Requested
 Information:
 appropriate)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States and/or PCT application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States and/or PCT application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to the patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

Prior U.S.
 Application(s):
 any)

_____ (Application Number)	_____ (Filing Date)	_____ (Status - patented, pending, abandoned)
_____ (Application Number)	_____ (Filing Date)	_____ (Status - patented, pending, abandoned)

I hereby appoint the following attorneys to prosecute this application and/or an international application based on this application and to transact all business in the Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the attorneys identified below, unless the inventor(s) or assignee provides said attorneys with a written notice to the contrary:

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PLEASE NOTE:

YOU MUST
COMPLETE
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4. Name of Inventor
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100. Name of Inventor

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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